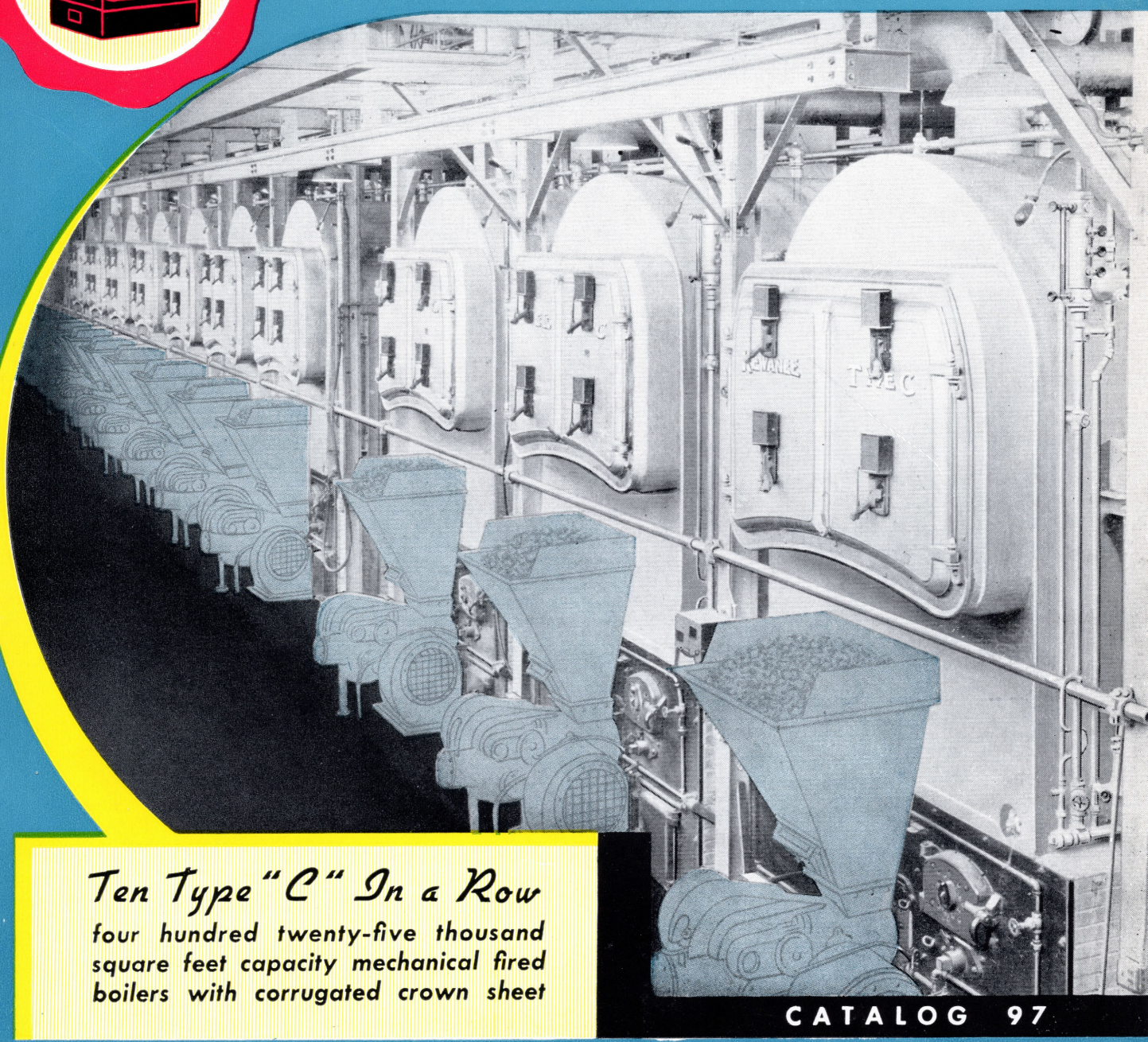
FILE NO. 30C1
(Aug. 1951)
A. I. A.

KEWANEE

TYPE C STEEL BOILER



Ten Type "C" In a Row

four hundred twenty-five thousand square feet capacity mechanical fired boilers with corrugated crown sheet

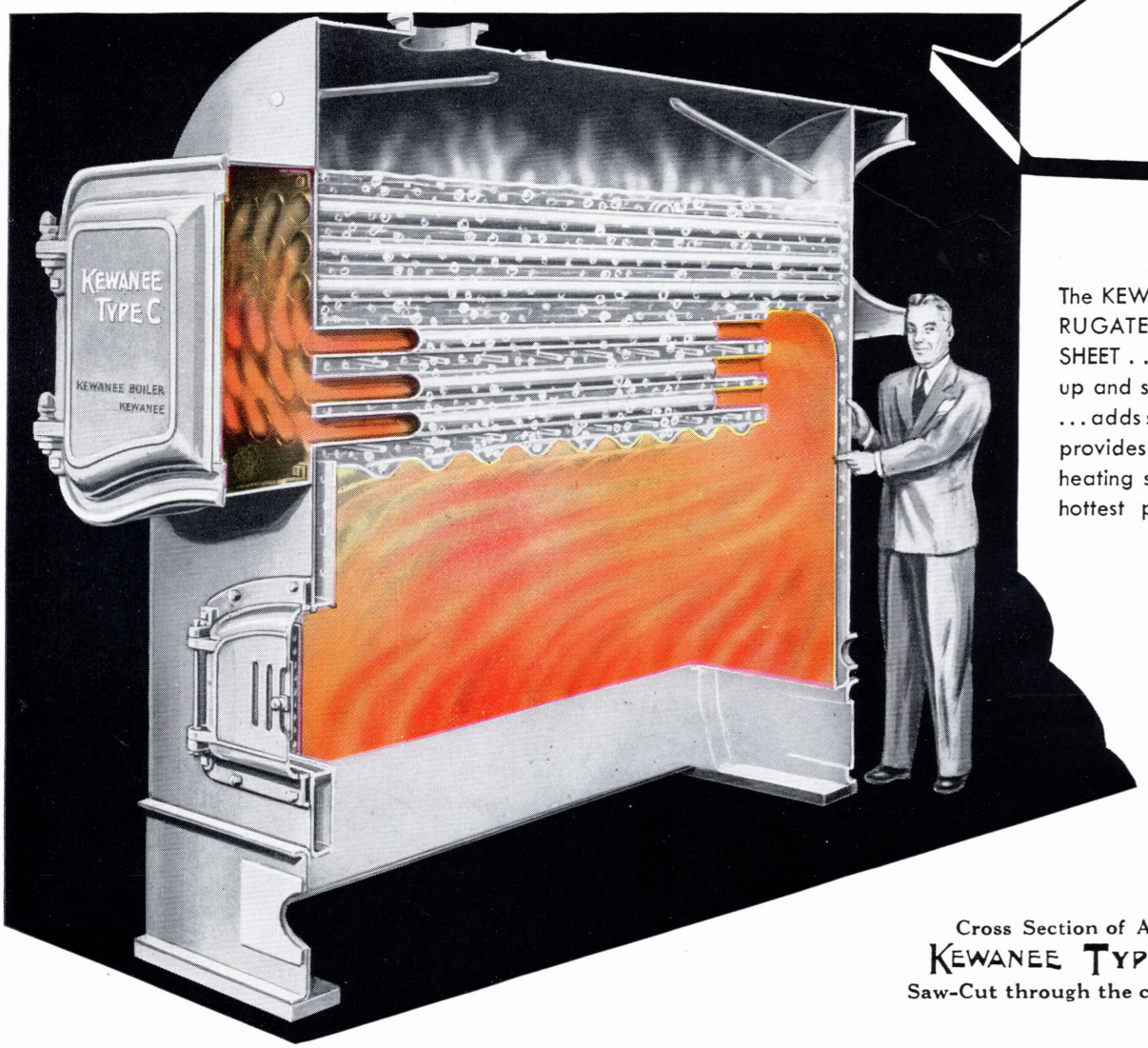
CATALOG 97

A HIGHLY PERFECTED STEEL HEATING BOILER SERIES

KEWANEE
TYPE C STEEL BOILER

Largest Selling Steel Boiler for Heating Big Buildings

This sawed-in-two Kewanee Type "C" shows why!



The KEWANEE CORRUGATED CROWN SHEET . . . right side up and self draining . . . adds strength and provides additional heating surface over hottest part of fire

SBI
Reg. U.S. Pat. Off.
MEMBER

Cross Section of Actual
KEWANEE TYPE C
Saw-Cut through the center

Ample proportions in the Kewanee Type "C" with everything get-at-able for keeping the boiler at tip top operating efficiency insure life-long economy with every kind of fuel and firing

Corrugated crown sheet has extra strength and heating surface . . . note especially the big high firebox, ideal for complete combustion with either hand or mechanical firing, and it permits converting from one to the other . . . and back again

. . in the Kewanee Process of Corrugating Type "C" Crown Sheets not even the slightest reduction in metal thickness is discernible by micrometer measurements.

Gas Travel extra length two-pass firetubes gets more heat out of the gases.

Water Content is ample for steady water line and is kept in rapid circulation thru free waterways.

Steam Space is proportioned for plenty of dry steam. The boiler shell construction is sound, and above all the fire-side and water-wetted surfaces are accessible.

And that's why over-all efficiencies of 80% and more . . . not uncommon with this fast steaming boiler are maintained continuously in actual practice.

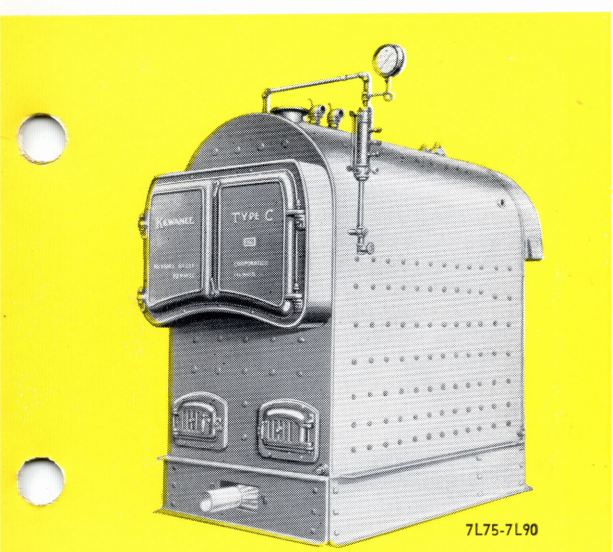
Hi-Firebox Electric-Weld

For Oil, Gas, Stoker or Hand Fired Coal

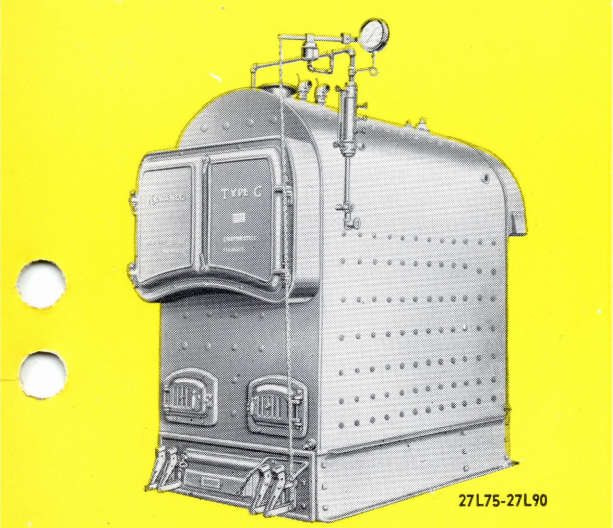
Kewanee Type "C" Welded Boiler was placed on the market in 1928 . . . the first of its kind. No claim to novelty in the compact shape was made at that time since a basic patent covering that general design had been taken out way back in 1873. Early attempts to use welding instead of riveting for this style had not been accorded recognition by Kewanee until improvements engineered and worked out exclusively at the Kewanee plant qualified Type "C" to fill the definite demand for a dependable heating boiler adapted to restricted space.

Backed by eighty years of boiler building experience Type "C" has won and kept first place in the industry as a compact boiler requiring less floor space yet maintaining unrestricted efficiency. It is a real boiler . . . a scientifically designed and skillfully manufactured steam generator built to the ASME code for low pressure heating boilers and conforming with the ratings of the SBI code.

This Type "C" welded model has become the accepted boiler for every operation served by steam of 15 lbs. pressure or less.



7L75-7L90



27L75-27L90

7L70 Series Hi-Firebox for Oil, Gas or Stoker

Specification Table and Plan page 4

The Kewanee Hi-Firebox Type "C" is built exactly right for oil, gas or stokers. The long water legs in this 7L70 provide essential height in the firebox to comply with S B I code furnace height requirements for mechanical firing.

Equipment: Steel base assembled with four cast iron corner posts, heavy steel flanged panels have 8½x11½" front and rear cleanout opening; insulated flue door; washout plugs; and flue cleaner with handle, socket wrench.

Trimmings for Steam only: Safety valve, steam gauge with syphon and cock; water column with water gauge, glass and cocks. All front smokeboxes have double doors.

Note 1. Manhole furnished on boilers 7L82, 27L82 and larger.

Note 2. Bridgewall omitted on boiler 27L75.

Note 3. Return Connection flanged on 7L88, 89, 90 and 27L88, 89, 90.

27L70 Series with Grates for Hand Fired Coal

Specification Table and Plan page 5

Kewanee 27L70 series is rated for hand-fired coal and built with grates in the Hi-Firebox which has the required length of water legs to provide S B I code furnace heights for change-over to oil, gas or stokers using mechanical fired ratings.

Equipment: Steel base fully assembled with heavy rocking (or dumping) grates and cast iron ash pit front, four cast iron corner posts, heavy steel flanged panels have 8½x11½" rear cleanout opening, except 36" boilers; refractory bridgewall; insulated flue doors; firedoor with liner; smokebox soot cleanout doors.

Trimmings for Steam only: Safety valve, steam gauge with syphon and cock; draft regulator; water column with water gauge, glass and cocks.

Firing Tools: Hoe, poker, slice bar and flue cleaner with handle, socket wrench

Type "C" may be fitted at extra cost at the factory with **Kewanee Indirect Hot Water Heating Coils**
Maximum size and number which can be installed in boilers . .

for STORAGE TANK OPERATION CAPACITY of COIL 40°-140° rise—3 hrs. Gallons with Boiler water				for INSTANTANEOUS FLOW COIL CAPACITY with 180° Boiler water 40°-140° rise Gallons in			
Boiler	Coil	212°	180°	Boiler	Coil	1 Hr.	1 Min.
	SR6-24	90	55		QON-1	280	4.7
	SR8-24	120	70		QON-2	350	5.8
	DR6-24	180	110		QON-3	420	7.0
	DR8-24	240	145		QON-4	490	8.2
	DR8-30	320	190				
	DR8-36	400	240				
	DR8-42	480	290	7L75	QON-7	600	10.0
	DR8-48	560	335	7L76	QON-8	700	11.7
7L75	DR8-54	640	385	7L77-85	two QON-8	1400	23.4
	DR8-60	720	430	7L86-90	three QON-8	2100	35.1
7L76	DR8-66	800	480				
7L77 2	DR8-66	1600	960				
7L78 2	DR8-72	1760	1060				
7L79, 80 2	DR8-78	1920	1150				
7L82 2	DR8-84	2080	1250				
	DR8-90	1120	670				
7L81 2	DR8-96	2400	1440				
7L83, 84 2	DR8-102	2560	1540				
7L86 3	DR8-102	3840	2310				
	DR8-108	1360	815				
7L85 2	DR8-114	2880	1730				
7L87, 88 3	DR8-120	4560	2730				
7L89, 90 3	DR8-120	4560	2730				

27L70 series boilers take same coil sizes as shown for 7L70 series.

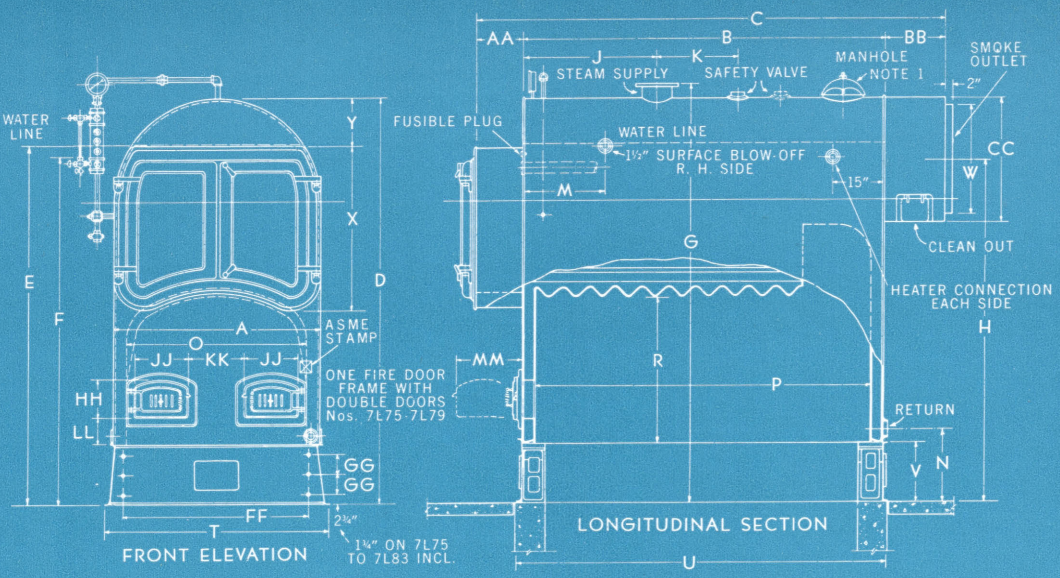
Any coils shorter than maximum lengths listed may be substituted in same boiler for smaller hot water needs.

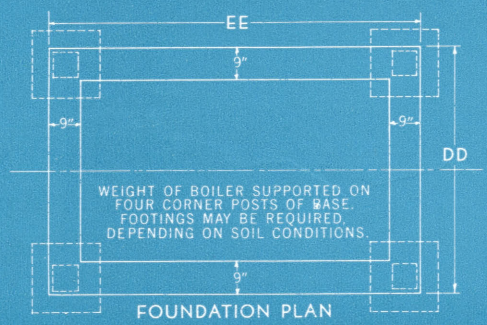
Hot water coil Inlet and Outlet same size iron pipe tap.
1¼" on tankless QON coils; 1¼" on storage DR coils, and 1" on SR coils.

FOOTNOTES

For overall clearance add 1½" for heads or 2½" for flange hub to Shell Width A—, pages 4 and 5.

Type "C" welded Hi-Firebox Boilers have three-inch tubes. 7L70 and 27L70 Series conform to ASME boiler construction code for 15 lbs. steam and 30 lbs. water, and for rating with the Industry Standard Practice approved by the Steel Boiler Institute in cooperation with U.S. Department of Commerce Recommendation R157.



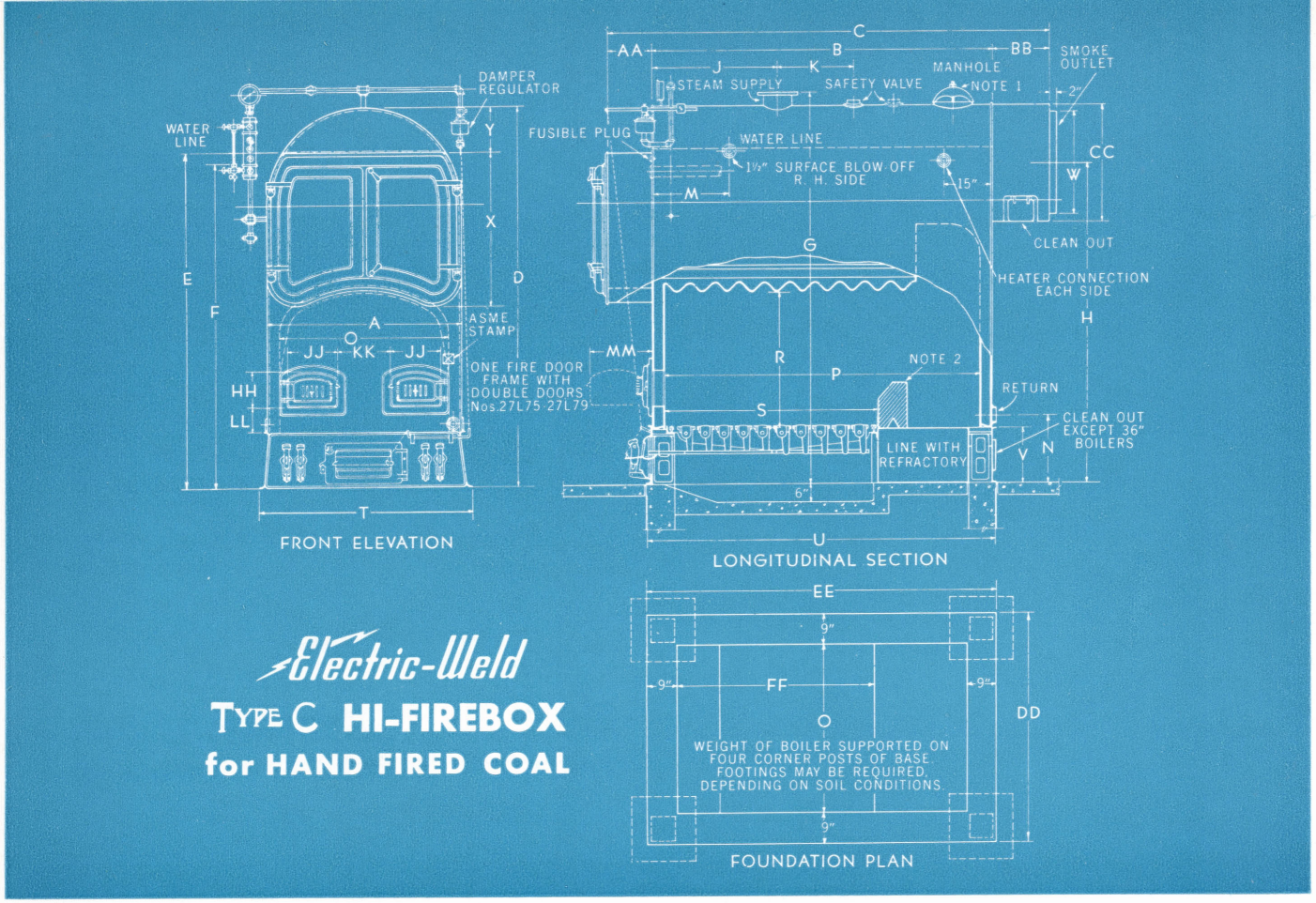


Electric-Weld

TYPE C HI-FIREBOX
for OIL, GAS or STOKER

Boiler Number	7L75	7L76	7L77	7L78	7L79	7L80	7L81	7L82	7L83	7L84	7L85	7L86	7L87	7L88	7L89	7L90
SBI Rating—Steam Radiation Sq. Ft.	3650	4250	4860	5470	6080	7290	8500	10330	12150	15180	18220	21250	24290	30360	36430	42500
Water Radiation Sq. Ft.	5840	6800	7770	8750	9720	11660	13600	16520	19440	24280	29150	34000	38860	48570	58280	68000
Btu. per Hour 1000's	876	1020	1166	1313	1459	1750	2040	2479	2916	3643	4373	5100	5830	7286	8743	10200
SBI Net Rating—Steam Sq. Ft.	3000	3500	4000	4500	5000	6000	7000	8500	10000	12500	15000	17500	20000	25000	30000	35000
Water Sq. Ft.	4800	5600	6400	7200	8000	9600	11200	13600	16000	20000	24000	28000	32000	40000	48000	56000
Btu. per Hour 1000's	720	840	960	1080	1200	1440	1680	2040	2400	3000	3600	4200	4800	6000	7200	8400
Heating Surface (SBI min.) Sq. Ft.	215	250	286	322	358	429	500	608	715	893	1072	1250	1429	1786	2143	2500
Furnace Volume (SBI min.) Cu. Ft.	26.1	30.4	34.8	39.1	43.5	52.1	60.8	73.8	86.8	108.5	130.2	151.8	173.5	216.9	260.3	303.6
Furnace Height (SBI min.) In.	29½	30	30½	31¼	31¾	32¾	34	35½	37½	40¼	43	46	48¾	54½	60½	66
Firebox Volume above Mud Ring Cu. Ft.	31.0	35.9	44.0	48.7	53.1	67.4	77.8	90.5	104.4	129.4	168.4	193.7	218.3	302.2	377.4	433.1
Safety Valve Capacity Lb. Steam per Hour	1075	1250	1430	1610	1790	2145	2500	3040	3575	4465	5360	6250	7145	8930	10715	12500
Breeching Diameter In.	19	19	22	22	22	24	24	28	28	30	31	35	35	39	41	43
Stack Diameter In.	16	17	18	19	20	21	22	24	26	28	29	31	33	36	38	40
Stack Height Ft.	40	45	40	45	50	50	60	55	65	65	70	65	75	90	80	100
Breeching Diameter, Two Boilers In.	24	25	26	27	28	30	31	34	36	40	41	44	47	50	54	56
Stack Diameter, Two Boilers In.	22	23	24	25	26	28	29	32	34	37	38	41	44	47	50	52
Stack Height, Two Boilers Ft.	50	55	50	55	60	60	70	65	75	75	80	75	85	100	90	110
Steam Supply Size In.	6	6	6	6	6	8	8	8	8	8	8	8	8	10	10	10
Return Size*** In.	4	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6
Water Heater Connection Size In.	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Shipping Weight Lb.	3900	4400	4900	5400	5800	6700	7600	8800	10000	11800	13600	15300	17000	20100	23200	26100
A—Boiler Width In.	36	36	42	42	42	48	48	54	54	60	66	72	72	78	84	84
B—Boiler Length Ft. In.	5–2	6–0½	5–10½	6–6½	7–2	7–2½	8–5	7–8	8–11½	9–2½	9–11½	9–3½	10–6½	11–1½	11–4½	13–1½
C—Boiler Length Overall Ft. In.	6–10½	7–9	7–10½	8–6½	9–2	9–4½	10–7	9–11	11–2½	11–6½	12–3½	12–1½	13–4½	14–9½	14–2½	15–11½
D—Boiler Height Overall In.	84	84	88½	88½	88½	92½	92½	106	106	115½	120½	130½	130½	138	162½	162½
E—Water Line Height In.	75	75	76½	76½	76½	79½	79½	91	91	100½	103	113	113	119	141½	141½
F—Water Column Height In.	71½	71½	73	73	73	76	76	87½	87½	97	99½	109½	109½	115½	138	138
G—Steam Supply Height, Flanged** In.	88	88	92½	92½	92½	97	97	110½	110½	120	124½	134½	134½	143	167½	167½
H—Smoke Outlet Height above Floor In.	70½	70½	73½	73½	73½	76½	76½	88¼	88¼	96½	99½	108½	108½	115½	137½	137½
J—Steam Supply Location In.	14	16	14	16	18	18	18	18	21	21	21	21	21	21	21	24
K—First Safety Valve Location In.	12	12	12	12	12	14	14	14	14	14	14	16	16	16	16	16
M—Surface Blow-Off Location In.	12	12	12	12	12	12	12	18	24	24	24	24	24	24	24	24
N—Return Height In.	18	18	18	18	18	18	18	18	18	21	21	21	21	23	27	27
O—Firebox Width In.	30	30	36	36	36	42	42	47½	47½	52½	58½	65	65	70	76	76
P—Firebox Length In.	55½	66	64	72	79½	80	94½	85½	101	103	112	104	119	136	128½	149½
R—Firebox Height In.	30	30	31¾	31¾	31¾	34	34	37½	37½	40¼	43	48¾	48¾	54½	66	66
T—Base Width In.	41½	41½	47½	47½	47½	53½	53½	59½	59½	66	72	78	78	84	90½	90½
U—Base Length In.	64	74½	72½	80½	88	88½	103	94	109½	113	122	114	129	146	139	160
V—Base Height In.	14	14	14	14	14	14	14	14	14	17	17	17	17	17	21	21
W—Smoke Outlet Diameter In.	19	19	22	22	22	24	24	28	28	30	31	35	35	39	41	43
X—Front Smokebox Height In.	34	34	34	34	34	35	35	42	42	48	48	51	51	52	61	61
Y—Front Smokebox Top to Boiler Top In.	10	10	13	13	13	14	14	16	16	16	18	17	17	19	21	21
AA—Front Smokebox Depth In.	9	9	10	10	10	11	11	12	12	12	12	14	14	14	14	14
BB—Rear Smokebox Depth In.	11½	11½	14	14	14	15	15	15	15	16	16	20	20	20	20	20
CC—Rear Smokebox Height In.	26	26	29	29	29	31½	31½	35	35	36	39	43	43	45½	49½	49½
DD—Foundation Width In.	48	48	54	54	54	60	60	65½	65½	70½	76½	83	83	88	94	94
EE—Foundation Length In.	65½	76	74	82	90	90	104½	96	111	114½	123½	115½	130½	147½	140½	161½
FF—Bolt Centers in Front Plate In.	31½	31½	37½	37½	37½	43½	43½	49½	49½	55½	61½	67½	67½	73½	79½	79½
GG—Bolt Centers in Front Plate In.	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	5¾	5¾	5¾	5¾	5¾	7¾	7¾
HH—Firedoor Height In.	13½	13½	13½	13½	13½	11	11	11	11	12	12	15	15	15	15	15
JJ—Firedoor Width In.	27½	27½	27½	27½	27½	16	16	16	16	20	20	23	23	23	23	23
KK—Space Between Firedoors In.						7	7	12	12	9	15	13	13	20	26	26
LL—Height Doors from Bottom Boiler In.	9½	9½	8½	8½	8½	8	8	8	8	8	8	8	8	10	10	10
MM—Opened Firedoor to Boiler In.	20	20	20	20	20	22½	22½	22½	22½	26½	26½	29½	29½	29½	29½	29½
*Outside Surface to Cover Sq. Ft.	95	106	116	125	134	149	166	187	209	235	269	291	316	379	432	468

*Front smokebox and front head below smokebox IS included. **Threaded outlet height 3" less. ***Return connection flanged on 7L88, 89, 90.



Electric-Weld

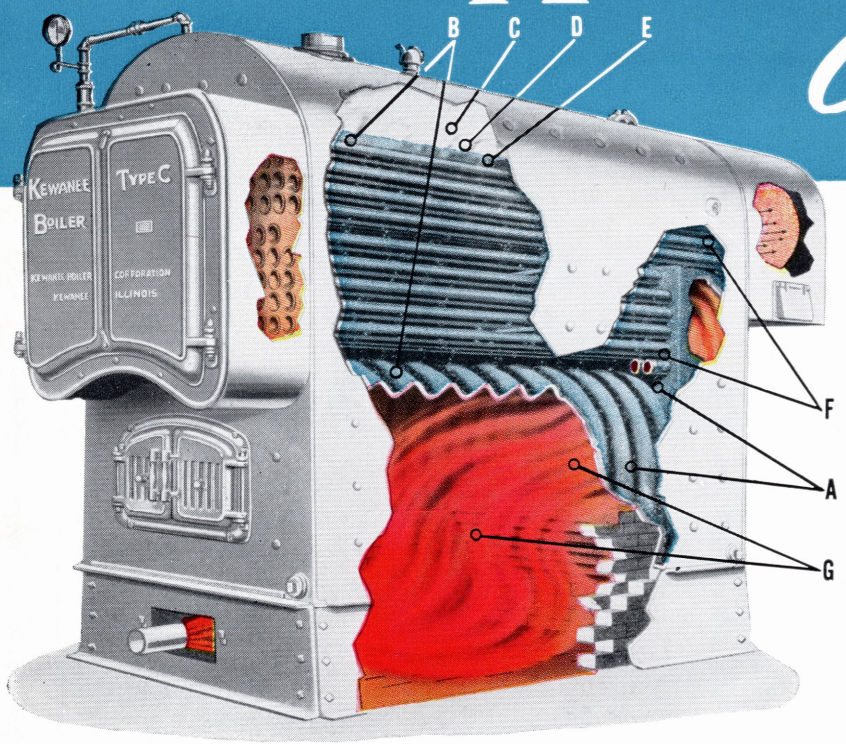
TYPE C HI-FIREBOX for HAND FIRED COAL

Boiler Number	27L75	27L76	27L77	27L78	27L79	27L80	27L81	27L82	27L83	27L84	27L85	27L86	27L87	27L88	27L89	27L90
SBI Rating—Steam Radiation....Sq. Ft.	3000	3500	4000	4500	5000	6000	7000	8500	10000	12500	15000	17500	20000	25000	30000	35000
Water Radiation....Sq. Ft.	4800	5600	6400	7200	8000	9600	11200	13600	16000	20000	24000	28000	32000	40000	48000	56000
Btu. per Hour....1000's	720	840	960	1080	1200	1440	1680	2040	2400	3000	3600	4200	4800	6000	7200	8400
SBI Net Rating—Steam....Sq. Ft.	2500	2920	3330	3750	4170	5000	5830	7080	8330	10420	12500	14580	16670	20830	25000	29170
Water....Sq. Ft.	4000	4670	5330	6000	6670	8000	9330	11330	13330	16700	20000	23330	26670	33330	40000	46670
Btu. per Hour....1000's	600	700	800	900	1000	1200	1400	1700	2000	2500	3000	3500	4000	5000	6000	7000
Heating Surface (SBI min.)....Sq. Ft.	215	250	286	322	358	429	500	608	715	893	1072	1250	1429	1786	2143	2500
Grate Area (SBI min.)....Sq. Ft.	10.5	11.4	12.2	13.4	14.5	16.4	18.1	20.5	22.5	25.6	28.4	30.9	33.2	37.4	41.2	44.7
Safety Valve Capacity....Lb. Steam per Hr.	1075	1250	1430	1610	1790	2145	2500	3040	3575	4465	5360	6250	7145	8930	10715	12500
Breeching Diameter....In.	19	19	22	22	22	24	24	28	28	30	31	35	35	39	41	43
Stack Diameter....In.	16	17	18	19	20	21	22	24	26	28	29	31	33	36	38	40
Stack Height....Ft.	50	55	55	55	60	60	65	65	70	70	75	75	80	95	95	110
Breeching Diameter, Two Boilers....In.	24	25	26	27	28	30	31	34	36	40	41	44	47	50	54	56
Stack Diameter, Two Boilers....In.	22	23	24	25	26	28	29	32	34	37	38	41	44	47	50	52
Stack Height, Two Boilers....Ft.	60	65	65	65	70	70	75	75	80	80	85	85	90	105	105	120
Steam Supply Size....In.	6	6	6	6	6	8	8	8	8	8	8	8	8	10	10	10
Return Size ***....In.	4	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6
Water Heater Connection Size....In.	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Shipping Weight....Lbs.	4500	5100	5600	6200	6700	7800	8800	10200	11500	13600	15700	17600	19500	23200	26700	30200
A—Boiler Width....In.	36	36	42	42	42	48	48	54	54	60	66	72	72	78	84	84
B—Boiler Length....Ft. In.	5–2	6–0½	5–10½	6–6½	7–2	7–2½	8–5	7–8	8–11½	9–2½	9–11½	9–3½	10–6½	11–1½	11–4½	13–1½
C—Boiler Length Overall....Ft. In.	6–10½	7–9	7–10½	8–6½	9–2	9–4½	10–7	9–11	11–2½	11–6½	12–3½	12–1½	13–4½	14–9½	14–2½	15–11½
D—Boiler Height Overall....In.	84	84	88½	88½	88½	92½	92½	106	106	115½	120½	130½	130½	138	162½	162½
E—Water Line Height....In.	75	75	76½	76½	76½	79½	79½	91	91	100½	103	113	113	119	141½	141½
F—Water Column Height....In.	71½	71½	73	73	73	76	76	87½	87½	97	99½	109½	109½	115½	138	138
G—Steam Supply Height, Flanged**....In.	88	88	92½	92½	92½	97	97	110½	110½	120	124½	134½	134½	143	167½	167½
H—Smoke Outlet Height above Floor....In.	70½	70½	73½	73½	73½	76½	76½	88¼	88¼	96½	99½	108½	108½	115½	137½	137½
J—Steam Supply Location....In.	14	16	14	16	18	18	18	18	21	21	21	21	21	21	21	24
K—First Safety Valve Location....In.	12	12	12	12	12	14	14	14	14	14	14	16	16	16	16	16
M—Surface Blow-Off Location....In.	12	12	12	12	12	12	12	18	24	24	24	24	24	24	24	24
N—Return Height....In.	18	18	18	18	18	18	18	18	18	21	21	21	21	23	27	27
O—Firebox and Ash Pit Width....In.	30	30	36	36	36	42	42	47½	47½	52½	58½	65	65	70	76	76
P—Firebox Length....In.	55½	66	64	72	79½	80	94½	85½	101	103	112	104	119	136	128½	149½
R—Firebox Height....In.	30	30	31¾	31¾	31¾	34	34	37½	37½	40¼	43	48¾	48¾	54½	66	66
S—Grate Length....In.	55	55	50	56	62	62	68	68	74	74	74	74	80	80	80	86
T—Base Width....In.	41½	41½	47½	47½	47½	53½	53½	59½	59½	66	72	78	78	84	90½	90½
U—Base Length....In.	64	74½	72½	80½	88	88½	103	94	109½	113	122	114	129	146	139	160
V—Base Height....In.	14	14	14	14	14	14	14	14	14	17	17	17	17	17	21	21
W—Smoke Outlet Diameter....In.	19	19	22	22	22	24	24	28	28	30	31	35	35	39	41	43
X—Front Smokebox Height....In.	34	34	34	34	34	35	35	42	42	48	48	51	51	52	61	61
Y—Front Smokebox Top to Boiler Top....In.	10	10	13	13	13	14	14	16	16	16	18	17	17	19	21	21
AA—Front Smokebox Depth....In.	9	9	10	10	10	11	11	12	12	12	12	14	14	14	14	14
BB—Rear Smokebox Depth....In.	11½	11½	14	14	14	15	15	15	15	16	16	20	20	20	20	20
CC—Rear Smokebox Height....In.	26	26	29	29	29	31½	31½	35	35	36	39	43	43	45½	49½	49½
DD—Foundation Width....In.	48	48	54	54	54	60	60	65½	65½	70½	76½	83	83	88	94	94
EE—Foundation Length....In.	65½	76	74	82	90	90	104½	96	111	114½	123½	115½	130½	147½	140½	161½
FF—Length of Ash Pit....In.	47	51	45	51	57	57	63	63	69	70	70	70	76½	76½	76½	82½
HH—Firedoor Height....In.	13½	13½	13½	13½	13½	11	11	11	11	12	12	15	15	15	15	15
JJ—Firedoor Width....In.	27½	27½	27½	27½	27½	16	16	16	16	20	20	23	23	23	23	23
KK—Space Between Firedoors....In.						7	7	12	12	9	15	13	13	20	26	26
LL—Height Doors from Bottom of Boiler....In.	9½	9½	8½	8½	8½	8	8	8	8	8	8	8	8	10	10	10
MM—Open Firedoor to Boiler....In.	20	20	20	20	20	22½	22½	22½	22½	26½	26½	29½	29½	29½	29½	29½
*Outside Surface to Cover....Sq. Ft.	95	106	116	125	134	149	166	187	209	235	269	291	316	379	432	468

*Front smokebox and front head below smokebox IS included. **Threaded outlet height 3″ less ***Return connection flanged on 27L88, 89, 90.

KEWANEE TYPE C

Characteristics



Material: Full thickness flange steel plate with tensile strength 55,000 to 65,000 pounds per square inch. This steel plate comes from the mill tested for physical strength and homogeneous quality with high ductility, after analysis checks for chemical composition and low carbon content as required for sound fusion arc welds.

Construction: Carefully built in strict accordance with the low pressure boiler code requirements of American Society of Mechanical Engineers, the highest authority.

Quality materials plus skilled workmanship backed by nearly 80 years experience qualify this boiler for the name "Kewanee."

Performance: Extensive operational tests made on Type "C" under practical work-a-day conditions prove the unusually hi efficiency in generating heat at low costs is maintained year-in year-out.

Design: Note in the cutaway section how the most effective heating surfaces are nearer the hottest fire zones, insuring quick transfer of more heat to the water.

A. Ample water volume in active circulation over all the hottest parts sweeps bubbles from the heating surfaces as fast as they are formed.

B. The Circulation, though rapid, is so orderly that the water level remains steady even under fluctuating loads and no slugs of water are carried into the steam mains.

C. High, wide steam space provides plenty of room for a large reserve supply of dry quality steam.

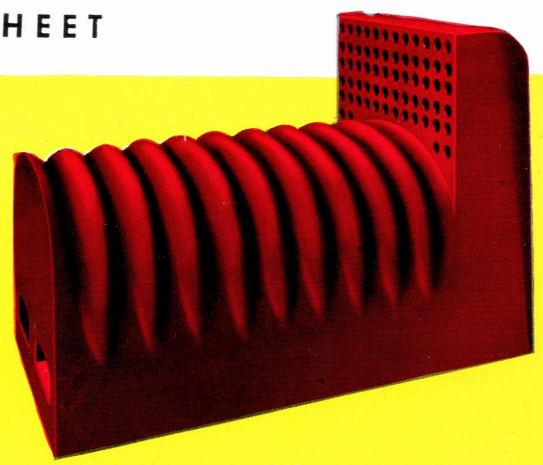
D. The Steam Disengaging area at the surface of the water is unbroken and extensive enough to prevent priming.

E. All the flues, including the top rows, are under the water line so as to be in effective use making steam.

F. The Flues are so grouped in Banks to permit free circulation of the water all around the wetted surface. This helps prevent sediment from lodging on the tubes. The double pass of gases through the entire length inside the tubes extracts all the usable heat.

G. There is ext a width and height in both Furnace and rear Combustion chamber, providing plenty of space and time for the hot gases to mix with air . . an essential for completely burning the fuel.

CORRUGATED CROWN SHEET



● The corrugated Crown Sheet . . . a distinguishing feature of all Kewanee Boilers in the Type "C" class . . . has definite advantages over the conventional type construction:—

CORRUGATING Adds Strength: A plain arch of steel has considerable strength but add corrugations and that strength is multiplied many times. By forming these corrugations one-at-a-time, under tremendous hydraulic pressure, in the flat plate the same thickness of metal is maintained over the entire crown sheet without the slightest impairment of original strength.

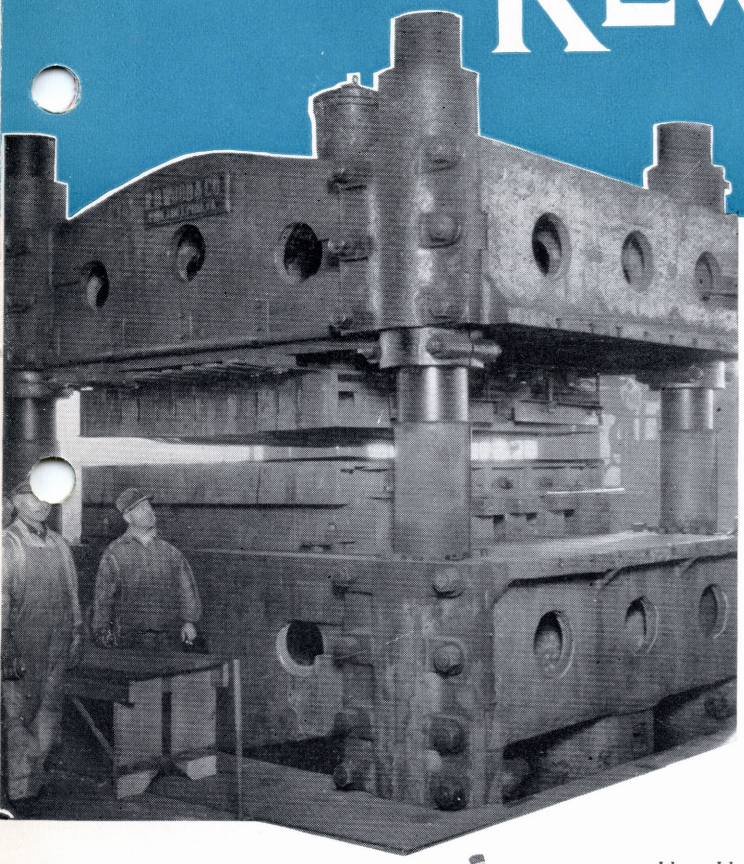
Adds Effective Heating Surface: The massive ridges of the corrugations 2 to 3 inches deep, practically double the heating surface which is directly facing the hottest part of the fire. This is one of the reasons why Type "C" is such a quick steamer, and why . . . though a compact boiler . . . it provides an unusual amount of heat with "top" efficiency.

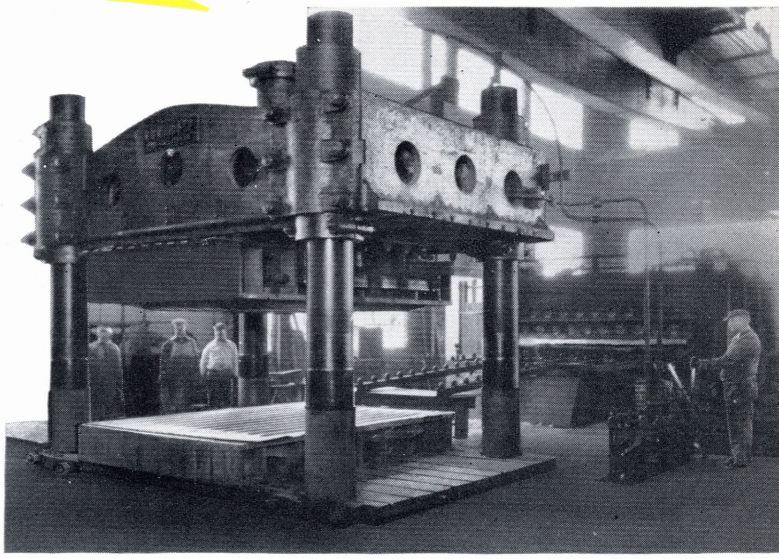
Right-Side-Up . . . Self Cleaning: Being right-side-up there are no pockets inviting sediment to lodge and scale to form. The action of the water circulating over the crown sheet tends to make it self cleaning.

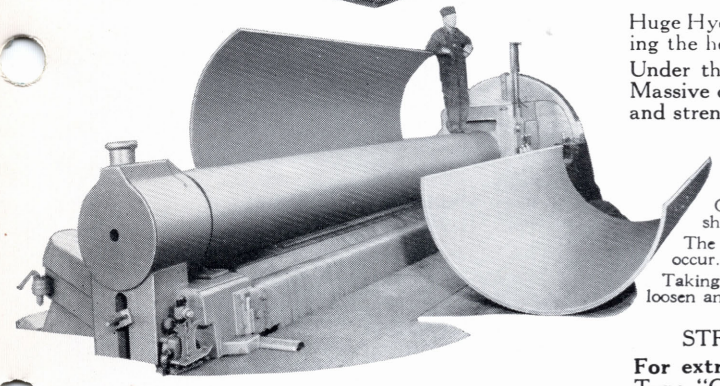
Rear Combustion Chamber: Streamline shape means fewer parts and shorter seams while the additional height makes for more perfect combustion. The waterways are tapered wide and free to provide easy access of more water to the hotter surfaces.

KEWANEE TYPE C

In the Shop







Huge Hydraulic Forming Press exerts pressures up to 3,000 tons for flanging, shaping or blanking the heaviest steel boiler plate.

Under these Corrugating dies pre-heated steel plates are kneaded into crown sheet blanks Massive corrugations are formed *one-at-a-time from center out* so undiminished plate thickness and strength are maintained.

Big Pinch Roll — Shapes Type "C" wagon-top all in one piece.

This roll can round 20-foot steel plate one and a half inch thick to a small circle in one pass.

The flat corrugated plate is arched in special die blocks to make the one piece crown sheet.

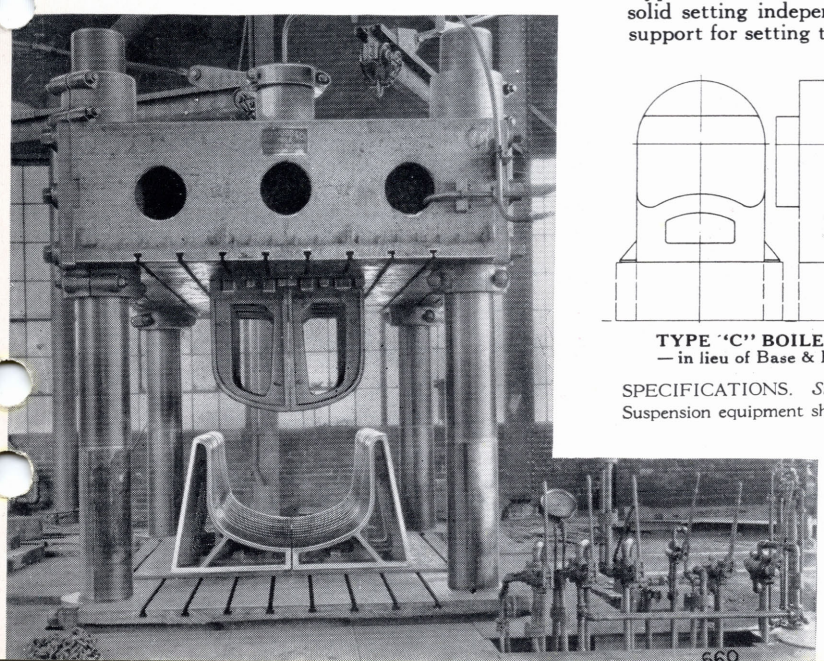
Corrugations do not extend down to the bottom edges but taper off so firebox plate and boiler wrapper sheet form a straight line joint with same linear expansion.

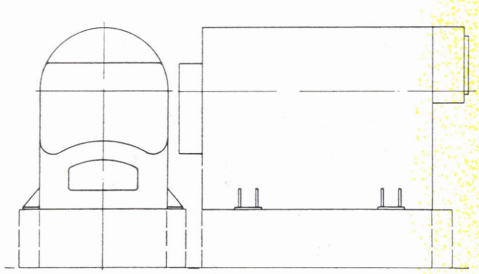
The corrugations take care of any unbalanced stresses so no unrelated movement of the tube head can occur.

Taking up the expansion and contraction keeps the tubes from loosening in the end plate but tends to loosen any scale lodging on the volutions of the crown sheet.

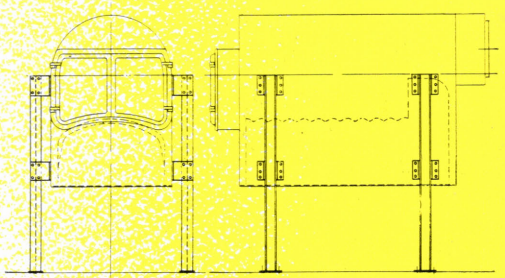
STRUCTURAL STEEL SUSPENSION and BOILER SUPPORT BRACKETS

For extra furnace height beyond the code standard as found within the Hi-Firebox of Type "C" Mechanically-Fired Boiler, our Kewanee structural steel suspension provides a solid setting independent of furnace brickwork. The gusset bearing plate brackets provide support for setting the boiler on a separate masonry base.





TYPE "C" BOILER Bearing Plate Brackets — in lieu of Base & Front without extra charge



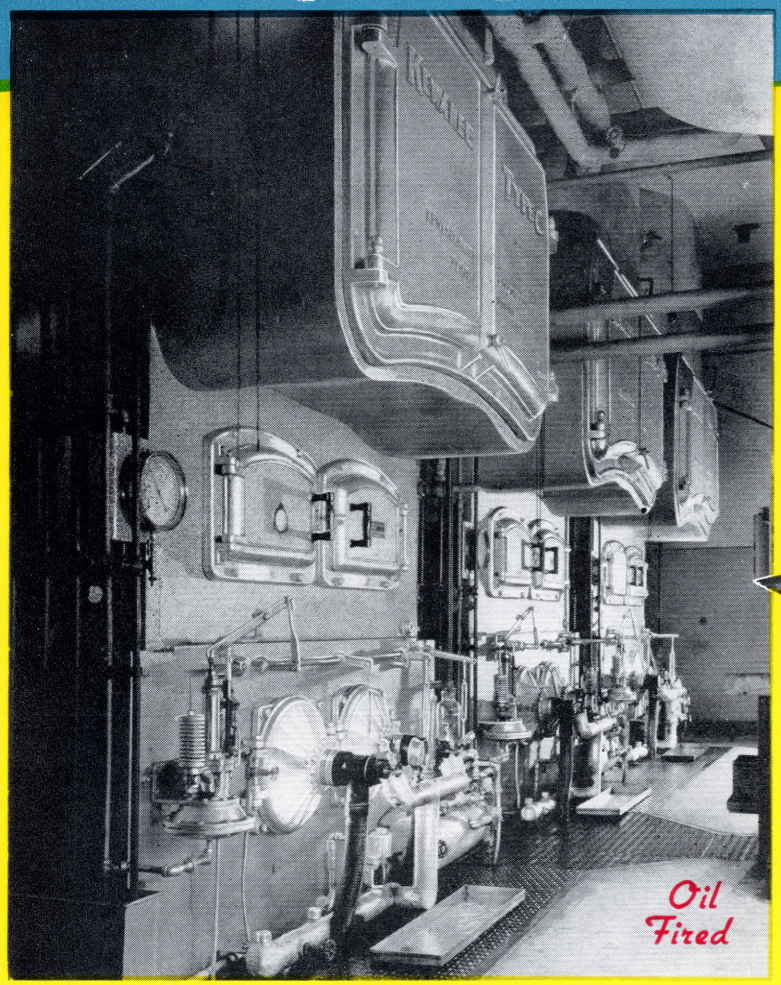
Steel Suspension for TYPE "C" BOILERS — there is an extra charge for this

SPECIFICATIONS. *Structural Steel Suspension* for Setting Boiler Independent of Furnace Brickwork. Suspension equipment shall consist of: four steel H-columns with bearing plates, one pair each side of boiler and eight pairs of steel forged brackets fastened to boiler shell by steel studs to safely carry the weight of boiler and to provide lateral stability, according to ASME boiler construction code. Each H-column shall be securely bolted to two pair of the boiler brackets and have bolt holes in foot plate for anchoring to foundation. (Anchor bolts not furnished by KBC.)

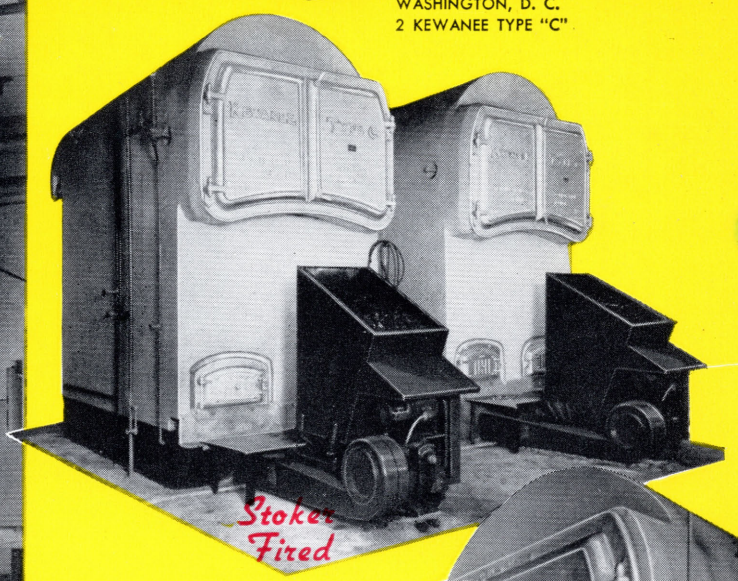
SPECIFICATIONS. *Gusset Bearing Plate Brackets* for supporting boiler on Masonry Base. Support brackets shall consist of two pairs of steel bearing plates each with two gussets welded to the boiler at bottom of waterleg. Each gusset to have ½" hole for wiring insulation to the boiler.

KEWANEE TYPE C

Typical Installations

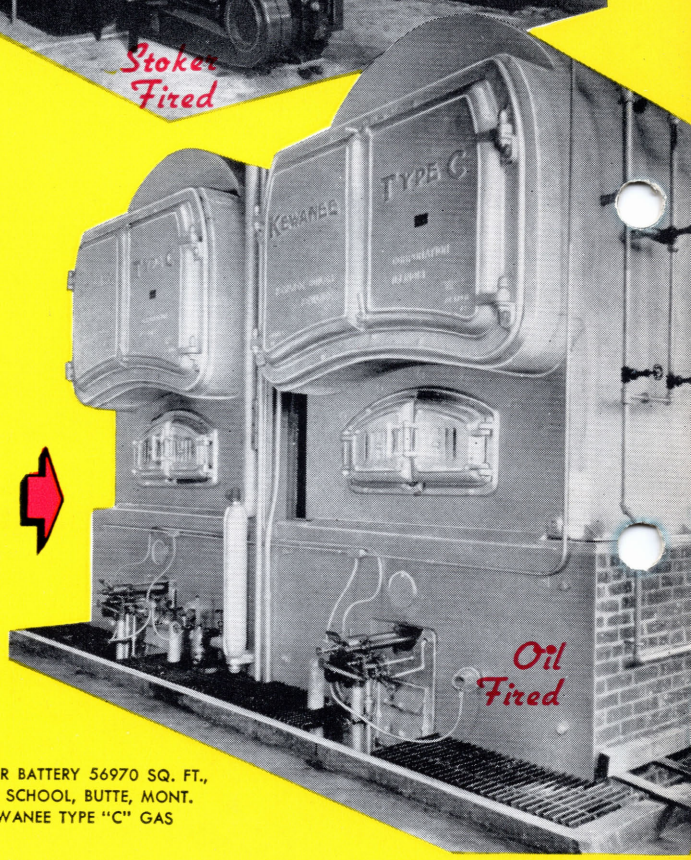


BOILER BATTERY 48580 SQ. FT.
INVESTMENT BLDG. 15th "K" NW.
WASHINGTON, D. C.
2 KEWANEE TYPE "C"



BOILER BATTERY 93000 SQ. FT.,
S. H. KRESS STORE, 5th-39th, N.Y.C.,
3 KEWANEE TYPE "C"

BOILER BATTERY 42500 SQ. FT.,
HYGRADE SYLVANIA CORP.,
SALEM, MASS.
2 KEWANEE TYPE "C" OIL



BOILER BATTERY 56970 SQ. FT.,
HIGH SCHOOL, BUTTE, MONT.
3 KEWANEE TYPE "C" GAS

KEWANEE-ROSS CORPORATION

DIVISION OF AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

KEWANEE, ILLINOIS

12-53-5M JP